



Janice K. Brewer
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 West Washington Street • Phoenix, Arizona 85007
(602) 771-2300 • www.azdeq.gov



Patrick J. Cunningham
Acting Director

NOTICE OF THE PRELIMINARY DECISION TO ISSUE AN INDIVIDUAL AQUIFER PROTECTION PERMIT

Public Notice No. 26-09

**Published on Tuesday, March 3, 2009
Published in the West Valley View**

Pursuant to Arizona Administrative Code, Title 18, Chapter 9, Article 1, the Director of the Arizona Department of Environmental Quality intends to issue an Individual Aquifer Protection Permit to the following applicant(s):

Facility Name: City of Avondale McDowell Recharge Basins

Aquifer Protection Permit No. P-105889

Permittee: Marilyn DeRosa (Water Resource Manager)
City of Avondale
399 East Lower Buckeye Road, Suite 100
Avondale, Arizona 85323

The facility is a recharge underground storage facility which is designed to recharge up to 13.5 million gallons per day (MGD) or 15,000 acre-feet per year, a combination of Central Arizona Project (CAP) water and Salt River Project (SRP) water from the Crystal Garden Wetlands and treated effluent from City of Avondale Water Reclamation Facility (WRF, P-100573).

The McDowell Recharge Basins (Basins) are located north of McDowell Road adjacent to the east bank of the Agua Fria River. The Basins comprise twenty seven acres of recharge basins with four individual recharge basins surrounded by 6-foot berms. The individual basins are laid out in an irregularly shaped pattern to conform to the local topography. The overall shape of the facility is triangular. The facility has Under Ground Storage permit (# 71-565257) issued by Arizona Department of Water Resources (ADWR). Operating depth of the basins range from 2 to 4 feet and is controlled by a gate valve at the recharge weir to govern the flow to each basin. Water levels will be varied in order to optimize infiltration rates. The flow rate of incoming surface water from wetlands and reclaimed water from the WRF will be measured separately at the recharge weirs before flow splitting to the basins.

Recharge creates a “mound” at the top of the water table. Reviewing the operational history, it appears that in the area of the Basins, the top of the water table generally ranges from ~ 65 to 95 feet below ground surface (bgs) in response to recharge. The depth to water in the area is approximately 85 feet bgs. The average groundwater flow direction in the vicinity of the basins is to the northwest, and west-northwest.

The permittee shall not begin to recharge Water Reclamation Facility effluent to basins until eight ambient groundwater sampling events have been completed and notified ADEQ.

With 24 hour notice, a draft permit with its related documentation is available for public review, Monday through Friday, 8:30 a.m. to 4:30 p.m., at ADEQ, 1110 W. Washington Street, Records Management Center, Phoenix, Arizona.

Persons may submit comments or request a public hearing on the proposed action, in writing, to Swathi Kasanneni, Arizona Department of Environmental Quality, 1110 W. Washington Street, Phoenix, Arizona 85007, within thirty (30) days from the date of this notice. A public hearing request must include the reason for such request.